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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,552	07/06/2005	Mitsuhiro Yamamoto	274746US2PCT	8157
22850 7590 11/28/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HAILEMARIAM, EMMANUEL	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 11/28/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/541,552

Applicant(s)

YAMAMOTO, MITSUHIRO

Examiner

Emmanuel Hailemariam

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/04/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1- 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Ha et al. (US 20040207593).

As to claim 1, Ha discloses an array substrate (**fig.1**) (**22**) for a flat display device [0011] comprising: a display unit (**fig.1**)(**10**) in which a pixel is placed at each of intersections between a plurality of signal lines (**fig.1-DL**); and a plurality of scan lines (**fig.1GL**), the signal and scan lines being routed in the form of a matrix (**fig.1** (**12**)); a plurality of output lines configured to output data signals to the signal lines, respectively (**fig.1- PD**, [0012], [0016]; a plurality of switches placed between the output lines and the signal lines to connect each output line to n signal lines (n is an integer equal to or greater than two) one after another within one horizontal period (**fig.1(14)**, [0106] );n switch control signal lines (**fig.2(29)**and **fig.18 (69)** ) configured to supply control electrodes of the switches with control signals for controlling on and off states thereof (**fig.2 (C1-Cn )**, and a plurality of electrode patterns configured to connect the control electrode of each switch to any one of the n switch control signal lines ( **fig.2 item gate**

line **DL1 to DLn** ); wherein the electrode patterns each two-dimensionally overlap all of the switch control signal lines and have substantially identical shapes **[0014]** ( *fig.2 item gate line DL1 and DLm + 1 wherein the gate lines show in figure .2 overlap with the control signal lines C1-Cm and are the same shape*).

**As to claim 2**, Ha discloses that the electrode patterns and the switch control signal lines are stacked with an insulating layer interposed there (fig.1 and 2, and 5A-8B); and are electrically connected to each other by contact holes formed in the insulating layer (fig.2 items C1-Cm and DL1-DLm+1) wherein said feature is inherent to the signal connection between lines C1-Cm and the gate lines for switches DL1 and DLm+1).

### ***Response To Arguments***

3. Applicant's arguments with respect to the claims 1-2 have been fully considered and are in part persuasive.

Applicant argues (a) Ha et al fails to teach the feature wherein the electrode patterns each two-dimensionally overlap *the entire* switch control signal lines and have *substantially identical* shapes.

The Examiner disagrees for the following reasons.

Per (a) Ha teaches wherein the electrode patterns (**C1-DL1**), (**C2- DL2**) each two-dimensionally overlap the entire switch control signal lines (**C1...Cm** ) and have substantially identical shapes, as shown in figure 2. Wherein the line identified as the gate line for switch DL1 represents the claimed electrode patterns and the gate line

overlaps with the control signal line Cm. The shapes of the gate lines are shown to be identical, and therefore the electrical patterns have substantially identical shapes.

*Furthermore, the pattern lines (C1-DL1)... are all two dimensional.*

Applicant argues (b) Edwards fails to teach the feature wherein the electrode patterns each two-dimensionally overlap *the entire* switch control signal lines and have *substantially identical* shapes.

The Examiner agrees. The rejection in view of Edwards has been withdrawn.

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Hailemariam whose telephone number is 571-270-1545. The examiner can normally be reached on M-F 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Hailemariam

10/19/07

  
AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER